October 2014

DQA Report on Result 1, Cluster 1 Round 3 and Cluster 2 Round 2 data

Directions: Use the following worksheet to complete an assessment of data for indicators against the 5 data quality standards outlined in the ADS. A comprehensive discussion of each criterion is included in TIPS 12 Data Quality Standards.

Data Quality Assessment Worksheet

USAID/Uganda Mission

Development Objective (DO): Increased Literacy and Health Seeking Behavior

Intermediate Result (IR): *Improved Early Grade Reading and Transition to English*

Indicators: *1a:Proportion of students who, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade level text in local languages 1.1: Proportion of learners reading at agreed upon benchmark of words per minute (P2,P4) in English and local language, compared to control;1:2: Proportion of learners comprehending at 80% or higher (P2, P4) English and Local Language, compared to control;*

Is this a Standard or Custom Indicator? (Mark "X") Standard **X** Custom__**X**_____

If standard, make sure the title matches the title in the Indicator Handbooks.

Both EGRA-specific (custom) and Standard Foreign Assistance Indicators are included

Name of Implementing Partner: Implementing Partner: *RTI. Data Quality Assessor: NORC*

Assessment Team Members: *NORC Performance and Impact Evaluation team: Varuni Dayaratna, Alicia Menendez, Yvonne Cao, with input from Mark Lynd, Stella Neema, Evelyn Namubiru, Betsy Bassan*

Date (s) of Assessment: *April 30, 2015*

Data Quality Assessment Methodology: *To assess the quality of data collected for Result 1, NORC's US and Uganda-based team carried out the following activities:*

> Reviewed data collection plans and procedures

> Reviewed questionnaire content, layout and CAPI functioning

> Reviewed interviewer training agendas, manuals and planned training pedagogy

> Observed interviewer training, piloting and data collection

> Attended data collection debriefing

> Reviewed cleaned response datasets for errors in student assessments, teacher/head teacher survey and school inventory

Data & Data Source(s): *The data assessed in this DQA consist of Round 3 data collected in October 2014 (and received by NORC in January 2015) for schools included in the sample designated as "Cluster 1" in NORC's impact evaluation of the USAID/Uganda School Health and Reading Program and Round 2 data also collected in October 2014 (and received by NORC in January 2015) for schools designated as "Cluster 2". Cluster 1 includes schools in 11 SHRP districts and 4 comparison districts that cover four language groups (Runyankore-Rukiga, Luganda, Lango and Ateso) and Cluster 2 includes schools in 10 SHRP districts that cover four language groups (Runyoro/Rutoro, Acholi, Lugbarati, Lumasaba). The data were collected using EGRA student assessment instruments, head teacher questionnaires, teacher questionnaires, school inventories and classroom observations. In this and in each subsequent data quality assessment carried out under the Performance and Impact Evaluation (P&IE) of the USAID/Uganda School Health and Reading Program, the annual dataset will include both the baseline data and follow-up data.*

Is the Indicator Reported to USAID/W? No

Rating:	X	Acceptable		Acceptable if Corrections are Made		Not Acceptable

Assessment against the 5 data Quality Standards:

Criterion	Definition	Yes or No	Explanation (Overall Summary)
1. Validity	Do the data clearly and adequately represent the intended result? Some issues to consider are: **Face Validity**: Would an outsider or an expert in the field agree that the indicator is a valid and logical measure for the stated result? **Attribution**: Does the indicator measure the contribution of the project? **Measurement Error**. Are there any measurement errors that could affect the data? Both sampling and non-sampling error should be reviewed.	**Unclear**	***Notes:*** **Face Validity:** *Literacy and reading skill measures included in the EGRA tool have been used to assess Early Grade Reading in a number of other countries prior to implementation in Uganda. The data collection instruments were adapted to Ugandan language and context via adaptation workshops and pretesting. The implementing partner (IP) has not provided comprehensive information on tests of reliability and validity of this instrument in the current context.* **Attribution:** *The sample design for both the Cluster 1 as well as Cluster 2 impact evaluation allows estimation of impact on literacy outcomes that can be attributed to the project. The Cluster 1 evaluation uses a mix of experimental (randomized controlled trial) and quasi-experimental design to assess the impact of the intervention at both the school-level, and at the district-level. The Cluster 2 evaluation uses an experimental (randomized controlled trial) design to assess the impact of the school-level intervention. Attribution will therefore be possible, as implementation of intervention followed the evaluation design (i.e. there is no apparent contamination of control groups).* **Measurement Error (Sampling):** *Cluster 2: A total of 114 schools were included for the Round 2 data collection (not including the Cohort 2B schools which are not part of NORC's impact evaluation). Two schools selected in the original NORC impact evaluation sample were replaced during data collection. A total of 4,234 students in these 114 schools were assessed – 3,201 P1 students and 1,123 P2 students. NORC will only include P1 students for the impact evaluation analysis.* *Learner Response Rates: Of the target of assessing 3,420 P1 learners, 3,201 P1 students from the sampled schools were actually assessed (93.6% of plan).* *Data collection procedures for EGRA were standardized and included in-person training as well as piloting of the EGRA instruments prior to data collection among the sample schools. Assessors were monitored (observed) by independent data quality assessors as well as members of Ministry of Education and Science (MoES) and NORC. On the occasions*

			when an assessor was found to be veering from established protocols, the data collection supervisory team was alerted to correct the errant behavior. *NORC has raised concerns about the narrow interpretation of correct letter sounds, nonword pronunciation and real-word pronunciation for some items in the pupil assessment instrument. The interpretation may result in biased measurement of pupils' literacy.*
2. Integrity	Do the data collected, analyzed and reported have established mechanisms in place to reduce manipulation or simple errors in transcription? ***Note**: This criterion requires the reviewer to understand what mechanisms are in place to reduce the possibility of manipulation or transcription error.*	**Yes**	***Notes:** The data collection tool is programmed as a computer-assisted interview. This mode has been shown to minimize data transcription errors, and NORC's review of the raw and cleaned data show that there are few errors from transcription.* *Data collection is carried out by the implementing partner, which, prima fascia, has the potential for manipulation. However, NORC evaluation staff have attended interviewer and supervisor training and observed data collection in the field, providing a level of independent oversight of the data collection that leads us to conclude that manipulation has not occurred and is very unlikely to occur.*
3. Precision	Are data sufficiently precise to present a fair picture of performance and enable management decision-making at the appropriate levels?	**unclear**	***Notes:*** *NORC estimated the sample required to detect a double-difference measure of impact of magnitude D = 0.20 with a power of 90%. The final sample for Cluster 2 was slightly lower than expected as the data collection team could not always assess 30 students per grade (although the overall response rate is quite high at more than 90%). It is therefore unclear at this stage whether the sample size will be sufficiently large to detect impacts.*
4. Reliability	Do data reflect stable and consistent data collection processes and analysis methods over time? ***Note:** This criterion requires the reviewer to ensure that the indicator definition is operationally precise (i.e. it clearly defines the exact data to be collected) and to verify that the data is, in fact, collected according to that standard definition consistently over time.*	**unclear**	***Notes**:* *The EGRA student assessment tool is programmed as an in-person computer-assisted interview (CAPI) using software that enforces skip patterns and reduces interviewer error (compared to Paper and Pencil). As part of its assessor training, the data collection trainers administer an inter-rater reliability test which is shared and discussed with the field team and independent observers. The data collection partner invites more assessors to training than will be hired and selected the best assessors from among those trained.* *The data collection processes and analysis methods are not all documented in writing and being used to ensure the same procedures are followed in a standardized fashion. NORC has provided some written documentation to the implementer, some of which has been used to improve training sessions.*
5. Timeliness	Are data timely enough to influence management decision-making (i.e. in terms of frequency and currency)?	**unclear**	***Notes:*** *The response data from Result 1 Cluster 1 and Cluster 2 October 2014 was received by NORC analysts in January 2015. The data were received with adequate time for NORC to carry out data quality review and cleaning tasks and to conduct descriptive and impact analysis within the timeframe required by USAID.*

A Summary of Key Issues and Recommendations:

Sample: we recommend that the IP notify NORC immediately of any deviations to the sampling protocol and seek assistance from NORC pior to engaging in school replacements.

Documentation: we recommend that Frequently Asked Questions arising during assessor training be recorded and documented in detail in order to ensure that test administration is consistent from year to year and that instructions given to assessors are consistent between trainers.

Limitations/Key Issues:

Actions Needed to address Limitations/Key Recommendations:

Approvals:

	Assessment Team members:	**Name :** Yvonne Cao **Position:** Evaluation Analyst, NORC **Name :** Gaelle Simon **Position:** Literacy Evaluator, NORC **Name:** Evelyn Namubiru **Position:** Resident Evaluation Manager, NORC

For Office Use Only:

Team Leader Officer Approval (Office Chief)
Name_____**Date**_____
M&E Specialist/SI Advisor/Quality Assurance Specialist (clearance): Name _____
Date_____